

## CLAIMS

### What is claimed is:

1. A light-emitting diode device, comprising a light-emitting diode die, a connection pin and a transparent envelop body, characterized in that the envelop body is a cylindrical body and a top surface of the envelop body being indented to form a conic concave or a polygonal concave with a tip angle between  $100^{\circ}$  to  $140^{\circ}$ .  
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2. The device of Claim 1, wherein the tip angle is  $130^{\circ}$  to  $140^{\circ}$ .
3. The device of claim 1, wherein the envelop body has a color substantially the same as that of the light generated by the light-emitting diode die.
- 10 4. The device of Claim 1, wherein the connection pin has an internal end terminated with a frame for holding the light-emitting diode die and the frame forms a recessed space for accommodating the light-emitting diode die therein.
5. A light-emitting diode device, comprising a light-emitting diode die, a connection pin and a transparent envelop body, characterized in that the envelop body is a cylindrical body and a top surface of the envelop body being indented to form a semi-spherical recess.  
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6. The device of claim 5, wherein the envelop body has a color substantially the same as that of the light generated by the light-emitting diode die.
7. The device of Claim 5, wherein the connection pin has an internal end terminated with a frame for holding the light-emitting diode die and the frame forms a recessed space  
20 for accommodating the light-emitting diode die therein.